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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,510	06/04/2001	Tomoaki Kishi	FY.16653US0A	4686

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EXAMINER

HOLMES, MICHAEL B

ART UNIT PAPER NUMBER

2121

DATE MAILED: 05/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/873,510

Applicant(s)

KISHI, TOMOAKI

Examiner

Michael B. Holmes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on June 04, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/873,510.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |



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Examiner's Detailed Office Action

1. This office action is responsive to application **09/873,510**, filed **June 04, 2001**.
2. **Claims 1-18** have been examined.

Information Disclosure Statement

3. Examiner acknowledges applicants' submission of prior art and information disclosure. Nevertheless, applicant is respectfully remind of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by continuing to submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's of application or thereafter.

Drawings

4. The formal drawings have been reviewed by the United States Patent & Trademark Office of Draftperson's Patent Drawings Review.

Specification

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is required in correcting any errors of which applicant may become aware in the specification.

Claim Objection

6. Claims 2-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Interpretation

7. Office personnel are to give claims their “**broadest reasonable interpretation**” in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See *also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (“During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. . . . The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are

precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.”). *see* MPEP § 2106

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by

Anthony Tzes, Pei-Yaun Peng, and John Guthy, “Genetic-Based Fuzzy Clustering for DC-Motor Friction Identification and Compensation, IEEE Transactions on Control Systems Technology, Vol. 6, No., 4, July 1998.

Regarding claim 1:

A method for controlling performance of a machine controlled by at least one control module having an input-output relationship regulated by control parameters, said method comprising the steps of:

(a) configuring a first generation of chromosomes coding for the control parameters by preselecting genes constituting the first generation of chromosomes from a selection space used as a gene pool, and activating the machine using the first generation of chromosomes, said genes being defined by coordinates in the selection space; **[(IV. Genetic-Based Fuzzy Modeling,**

page 465-466)]

(b) selecting and scoring adapted chromosome(s) by evaluating each chromosome based on signal; **[(V. Experimental Studies on Friction Identification and Compensation, page 466-468)]**

indicative of performance of the machine; **[(V. Experimental Studies on Friction Identification and Compensation, page 466-468)]**

(c) setting a search area in the selection space in accordance with the score(s) under predetermined rules; **[(IV. Genetic-Based Fuzzy Modeling, page 465-466) & (A. Friction Modeling and Identification, page 468-470)]**

(d) selecting genes for a subsequent generation of chromosomes within the search area, and operating the machine using the subsequent generation of chromosomes; **[(IV. Genetic-Based Fuzzy Modeling, page 465-466) & (A. Friction Modeling and Identification, page 468-470)]**
and

(e) repeating steps (b) through (d) while operating the machine until desired performance of the machine is demonstrated. **[(IV. Genetic-Based Fuzzy Modeling, page 465-466) & (V. Experimental Studies on Friction Identification and Compensation, page 466-468)].**

Conclusion

10. The prior art made of record and (listed of form **PTO-892**) not relied upon is considered pertinent to applicant's disclosure as follows. Applicant or applicant's representative is respectfully reminded that in process of patent prosecution i.e., amending of claims in response to a

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rejection of claims set forth by the Examiner per Title 35 U.S.C. The patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and any objections made. Moreover, applicant or applicant's representative must clearly show how the amendments avoid or overcome such references and objections. *See 37 CFR § 1.111(c).*

Correspondence Information

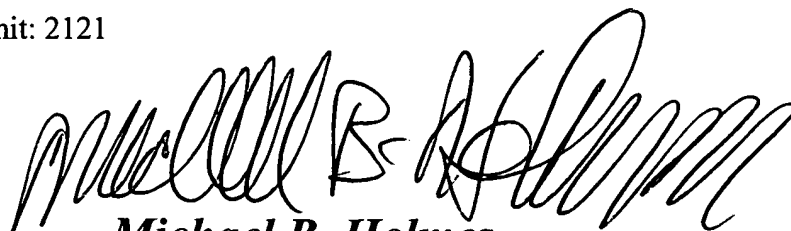
11. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Michael B. Holmes** who may be reached via telephone at **(703) 308-6280**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding After Final issues, please send it to **(703) 746-7238**. If you need to send an Official facsimile transmission, please send it to **(703) 746-7239**. If you would like to send a Non-Official (draft) facsimile transmission the fax is **(703) 746-7240**. If attempts to reach the examiner by telephone are unsuccessful, the **Examiner's Supervisor, Anthony Knight**, may be reached at **(703) 308-3179**.

Any response to this office action should be mailed too:

Director of Patents and Trademarks Washington, D.C. 20231. Hand-delivered responses should be delivered to the Receptionist, located on the fourth floor of **Crystal Park II, 2121 Crystal Drive Arlington, Virginia**.

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A handwritten signature in black ink, appearing to read 'Michael B. Holmes', written in a cursive, stylized script.

Michael B. Holmes

Patent Examiner

Artificial Intelligence

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Patent & Trademark Office